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Via Certified Mail – Return Receipt Requested

April 24, 2019

Curtis Paxton, Director of Utilities
Tim Erskine, Chief Plant Operator
City of Vacaville - Dept. of Utilities
Administrative Offices
6040 Vaca Station Road
Elmira, CA 95625

MAY 02 2019

Jeremy Craig, City Manager
Members of the City Council
City of Vacaville
650 Merchant Street
Vacaville, CA 95625

Re: Notice of Violations and Intent to File Suit Under the Federal Water Pollution Control Act (Clean Water Act)

Dear Mr. Paxton, Mr. Erskine, Mr. Craig and Members of the City Council:

STATUTORY NOTICE

This Notice is provided on behalf of California River Watch (“River Watch”) with regard to violations of the Clean Water Act (“CWA” or “Act”), 33 U.S.C. § 1251 et seq., that River Watch alleges are occurring through:

1. the City of Vacaville’s ownership and operation of its municipal separate storm sewer systems (“MS4”);
2. the City of Vacaville’s ownership and operation of the Easterly Wastewater Treatment Plant (“Facility”) and its associated sewer collection system.

River Watch hereby places the City of Vacaville (“City”) as owner and operator of the Facility and associated collection system and MS4, on notice that following the expiration of sixty (60) days from the date of this Notice, River Watch will be entitled under CWA § 505(a), 33 U.S.C. § 1365(a), to bring suit in the U.S. District Court against the City as the result of violations of the City’s National Pollution Discharge Elimination System (“NPDES”) Permit governing the Facility and collection system, and the General Permit governing the MS4.

The CWA regulates the discharge of pollutants into navigable waters. The statute is structured in such a way that all discharges of pollutants are prohibited with the exception of enumerated statutory provisions. One such exception authorizes a discharger, which has been issued a permit pursuant to CWA § 402, 33 U.S.C. § 1342, to discharge designated pollutants at certain levels subject to certain conditions. The effluent discharge standards or limitations specified in an NPDES permit define the scope of the authorized exception to the CWA § 301(a), 33 U.S.C. § 1311(a) prohibition such that violation of a permit term or condition places a discharger in violation of the CWA. River Watch alleges the City is in violation of the CWA by violating the terms of its NPDES permit.

The CWA provides that authority to administer the NPDES permitting system in any given state or region can be delegated by the Environmental Protection Agency (“EPA”) to a state or to a regional regulatory agency provided that the applicable state or regional regulatory scheme under which the local agency operates satisfies certain criteria, see 33 U.S.C. § 1342(b). In California, the EPA has granted authorization to a state regulatory apparatus comprised of the State Water Resources Control Board (“SWRCB”) and several subsidiary regional water quality control boards to issue NPDES permits. The entity responsible for issuing NPDES permits and otherwise regulating the City’s operations in the region at issue in this Notice is the Regional Water Quality Control Board, Central Valley Region (“RWQCB-CV”).

While delegating authority to administer the NPDES permitting system, the CWA provides that enforcement of the statute's permitting requirements relating to effluent standards or limitations imposed by the Regional Boards can be ensured by private parties acting under the citizen suit provision of the statute, see CWA § 505, 33 U.S.C. § 1365. River Watch is exercising such citizen enforcement to enforce compliance by the City with the CWA.

NOTICE REQUIREMENTS

The CWA requires that any Notice regarding an alleged violation of an effluent standard or limitation, or of an order with respect thereto, shall include sufficient information to permit the recipient to identify the following:

1. The Specified Standard, Limitation, or Order Alleged to Have Been Violated

River Watch contends the order being violated is NPDES No. CAS000004, *General Permit for Waste Discharge Requirements (WDRs) For Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (MS4s)* (“MS4 Permit”). River Watch has identified specific violations of the MS4 Permit including effluent and receiving water limit violations and failure to either comply with or provide evidence that the City has complied with all the terms of the MS4 Permit.

River Watch further contends the City is violating NPDES No. CA0077691, *Waste Discharge Requirements For City of Vacaville Easterly Wastewater Treatment Plant*, the order regulating Vacaville’s Facility and sewage collection system (“Sewage System Permit”). The Sewage System Permit requires Vacaville to comply with SWRCB Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements For Sanitary Sewer Systems* (“Statewide WDR”). River Watch identifies specific violations of the Sewage System Permit including sewage system overflows, effluent and receiving water limit violations, and the failure to either comply with or provide evidence that the City has complied with all the terms of the Sewage System Permit. River Watch also identifies violations of the Statewide WDR made enforceable under the Sewage System Permit.

2. The Activity Alleged to Constitute a Violation

River Watch contends that from April 22, 2014 through April 22, 2019, the City violated the Act as described in this Notice. River Watch contends these violations are continuing or have a likelihood of occurring in the future.

A. Violations of the MS4 Permit

The MS4 Permit states in relevant part:

B. DISCHARGE PROHIBITIONS

1. Discharges of waste from the MS4 that are prohibited by Statewide Water Quality Control Plans or applicable Regional Water Quality Control Plans (Basin Plans) are prohibited.

2. Discharges of storm water from the MS4 to waters of the U.S. in a manner causing or threatening to cause a condition of pollution or nuisance as defined in Water Code § 13050 are prohibited.

3. Discharges through the MS4 of material other than storm water to waters of the U.S. shall be effectively prohibited, except as allowed under this Provision or as otherwise authorized by a separate NPDES permit. The following non-storm water discharges are not prohibited provided any pollutant discharges are identified and appropriate control measures to minimize the impacts of such discharges, are developed and implemented under the Permittee's storm water program. This provision does not obviate the need to obtain any other appropriate permits for such discharges.

- a. water line flushing;
- b. individual residential car washing;
- c. diverted stream flows;
- d. rising ground waters;
- e. uncontaminated ground water infiltration
(as defined at 40 C.F.R. § 35.2005(20)) to separate storm sewers;
- f. uncontaminated pumped ground water;
- g. discharges from potable water sources;
- h. foundation drains;
- i. air conditioning condensation;
- j. springs;
- k. water from crawl space pumps;
- l. footing drains;
- m. flows from riparian habitats and wetlands;
- n. de-chlorinated swimming pool discharges; and
- o. incidental runoff from landscaped areas
(as defined and in accordance with Section B.4 of this Order).

C. EFFLUENT LIMITATIONS

1. Permittees shall implement controls as required by this Order to reduce the discharge of pollutants from their MS4s to waters of the U. S. to the MEP.

D. RECEIVING WATER LIMITATIONS

Discharges shall not cause or contribute to an exceedance of water quality standards contained in a Statewide Water Quality Control Plan, the California Toxics Rule (CTR), or in the applicable Regional Water Board Basin Plan.

E. PROVISIONS FOR ALL TRADITIONAL SMALL MS4 PERMITTEES

E.11.h. Permittee Operations and Maintenance Activities (O&M)

(i) Task Description – Within the third year of the effective date of the permit, the Permittee shall assess their O&M activities for potential to discharge pollutants in storm water and inspect all O&M BMPs on a quarterly basis.

(ii) Implementation Level - The Permittee shall:

(a) Develop and implement a program to assess O&M activities and subsequently develop applicable BMPs. The following Permittee O&M activities shall be included in the assessment for their potential to discharge pollutants in storm water:

- 1) Road and parking lot maintenance, including sidewalk repair, curb and gutter repair, pothole repair, pavement marking, sealing, and re-paving
- 2) Bridge maintenance, including re-chipping, grinding, saw cutting, and painting
- 3) Cold weather operations, including plowing, sanding, and application of deicing compounds and maintenance of snow disposal areas
- 4) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation
- 5) Storm water relevant Permittee-sponsored or sanctioned events such as large outdoor festivals, parades, or street fairs (eg. Earth Day, Coastal Cleanup Day, Creek Week)
- 6) Green waste deposited in the street
- 7) Graffiti removal
- 8) Hydrant flushing.

River Watch Contends the City is discharging hexavalent chromium above California Toxics Rule ("CTR") limits of 11 µg/l contentious, 16 µg/l maximum to surface waters (see 40 CFR 131.38). Identified in Attachment 1 are the zones where the City discharges, and the amounts discharged in each zone including areas with water supply above the CTR for hexavalent chromium (e.g., Zones 22 through 24). Identified in Attachment 2 are the location of wells containing hexavalent chromium which will result in CTR limit exceedances from hydrant discharges. River Watch contends the City allows these discharges to surface waters in part to identify potential problems in the storm drain system such as blockages, breaks, etc. The City admits that once the water enters a storm drain, it flows through pipes until it enters a creek or waterway. (See *SF Baykeeper v. West Bay SD*, 791 F. Supp 2d 719, 756 (N.D. CA 2011); when stormdrains lead to surface waters it can be assumed that discharges to that stormdrain reached surface waters).

The City discharges millions of gallons of potable water with levels of hexavalent chromium above the CTR limit into surface waters such as Putah Creek, Alamo Creek, Ulatis Creek, and Gibson Canyon Creek – all waters of the United States. The CTR limits are Water Quality Objectives (“WQOs”) that need to be attained at the point of discharge. (See *Santa Monica Baykeeper v. Kramer Metals, Inc.*, 619 F. Supp. 2d 914, 926-927 (CD CA 2009) and the companion case *Santa Monica Baykeeper v. International Metals Ekco, Ltd.*, 619 F. Supp. 2d 936, 947-948 (CD CA 2009)).

Discharging hexavalent chromium into surface waters above the CTR limit by definition adversely affects beneficial uses of those waters. The SWRCB and the RWQCB-CV have determined that exceedances of WQOs adversely affect beneficial uses. The City’s data demonstrates that levels of hexavalent chromium remain above the CTR thousands of feet from the well head, and that any hydrant discharge within that zone will exceed the CTR limit. As the RWQCB-CV does not provide for mixing zones, the highest in-stream concentration is at the discharge point.

The MS4 Permit states that the “following non-storm water discharges are not prohibited provided any pollutant discharges are identified and appropriate control measures to minimize the impacts of such discharges, are developed and implemented under the Permittee’s storm water program.” (SWRCB Order No. 2013-0001-DWQ, pg. 17). This list includes “discharges from potable water sources” which “shall not cause or contribute to an exceedance of water quality standards contained in a Statewide Water Quality Control Plan, the California Toxics Rule (CTR), or in the applicable Regional Water Board Basin Plan.” (SWRCB Order No. 2013-0001-DWQ, D. Receiving Waters, pg. 19). The MS4 Permit also requires the “following Permittee O&M [operation & maintenance] activities shall be included in the assessment for their potential to discharge pollutants in storm water: 8) Hydrant flushing.” (SWRCB Order No. 2013-0001-DWQ, pg. 46). The City’s discharges which exceed the CTR for hexavalent chromium are not authorized under SWRCB Order No. 2013-0001-DWQ. The City has not developed “appropriate control measures to minimize the impacts of such discharges” or any assessment as required to determine the “potential to discharge pollutants” of hydrant flushing.

B. Violations of the Sewage System Permit

1. Sanitary Sewer Overflows, Inadequate Reporting, and Failure to Mitigate Impacts

a. Sanitary Sewer Overflow Occurrences

Sanitary Sewer Overflows (“SSOs”), in which untreated sewage is discharged above-ground from the collection system prior to reaching the Facility, are alleged to have

occurred both on the dates identified in California Integrated Water Quality System (“CIWQS”) Interactive Public SSO Reports, and on the dates when no reports were filed by the City, all in violation of the CWA.

The Facility’s sewer collection system has experienced inflow and infiltration (“I/I”) during wet weather. Structural defects allow I/I into the sewer lines and result in a buildup of pressure causing SSOs. Overflows caused by blockages and defects occur even during dry weather. SSOs result in the discharge of raw sewage into gutters, canals and storm drains connected to adjacent surface waters in and around the City.

A review of the City’s CIWQS Spill Public Report – Summary Page dated April 10, 2019 identifies the “Total Number of SSO locations” as 117, with 86,350 “Total Vol. of SSOs (gal)” discharged into the environment. These discharges pose a nuisance pursuant to California Water Code § 13050(m).

A review of the CIWQS SSO Reporting Program Database specifically identifies numerous SSOs, several of which reaching waters of the United States (see SSO WDR Section C.1.). Several other SSOs that may have not reached a water of the United States nonetheless resulted in a nuisance as defined by California Water Code § 13050(m) (see SSO WDR Section C.2.). Furthermore, River Watch contends the City fails to adequately sample all the SSOs to determine the nature and impact of the release (see WDR Section D.7.v.).

b. Inadequate Reporting of Discharges

Full and complete reporting of SSOs is essential to gauging their impact upon public health and the environment. The City’s SSO Reports, which should reveal critical details about each of these SSOs, lack responses to specific questions that would present sufficient information to accurately assess and ensure these violations would not recur.

In addition, following a review of the SSO reports filed by the City, River Watch’s expert believes many of the SSOs reported by the City as not reaching a surface water did in fact reach surface waters, and that the SSOs reported were in greater volume than stated. River Watch’s expert also believes that a careful reading of the time when the SSO began, the time the City received notification of the SSO, the time of the City’s response, and the time at which the SSO ended, too often appear as unlikely estimations.

Given the unlikely accuracy of the times and intervals provided in these reports, it is difficult to consider the stated volumes as accurate. Without correctly reporting the spill start and end time, there is a danger that the duration and volume of a spill will be underestimated.

c. Failure to Mitigate Impacts

River Watch contends the City fails to adequately mitigate the impacts of its SSOs. The City is a permittee under the Statewide WDR governing the operation of sanitary sewer systems. The Statewide WDR requires the City to take all feasible steps, and perform necessary remedial actions following the occurrence of an SSO, including limiting the volume of waste discharged, terminating the discharge, and recovering as much of the wastewater as possible. Further remedial actions include intercepting and re-routing of wastewater flows, vacuum truck recovery of the SSO, cleanup of debris at the site, and modification of the collection system to prevent further SSOs at the site.

The EPA's "*Report to Congress on the Impacts and Control of CSOs and SSOs*" (U.S. Environmental Protection Agency, Office of Water (2004)) identifies SSOs as a major source of microbial pathogens and oxygen depleting substances. Numerous biological habitat areas exist within areas of the City's SSOs. Neighboring waterways include sensitive habitat areas. River Watch finds no record of the City performing any analysis of the impact of its SSOs on habitat of protected species under the Endangered Species Act, nor any evaluation of the measures needed to restore water bodies containing biological habitat from the impacts of SSOs.

2. Sewer Collection System Subsurface Discharges Caused by Underground Exfiltration

It is a well-established fact that exfiltration caused by structural defects in a sewer collection system result in discharges to adjacent surface waters either directly or via underground hydrological connections. Studies tracing human markers specific to the human digestive system in surface waters adjacent to defective sewer lines in other systems have verified the contamination of the adjacent waters with untreated sewage.

River Watch contends untreated or partially treated sewage is discharged from the City's collection system and treatment ponds either directly or via hydrologically connected groundwater to surface waters. Due to SSOs, surface waters become contaminated with pollutants, including human pathogens. Chronic failures in the collection system pose a substantial threat to public health.

Evidence of exfiltration can also be supported by reviewing mass balance data, I/I data, and video inspection as well as testing of waterways adjacent to sewer lines for nutrients, human pathogens and other human markers such as caffeine. Any exfiltration found from the City is a violation of the Sewage System Permit and thus the CWA.

3. Violations of Effluent Limitations

A review of the City's Self-Monitoring Reports ("SMRs") identifies the following reported violations of effluent limitations:

12/31/18	Chronic toxicity and failure to conduct accelerated monitoring as required in the Accelerate Monitoring Specifications
11/30/18	Failure to monitor BOD
10/02/17	Chronic toxicity
04/03/17	Exceeding receiving water temperature
01/23-25/17	Coliform
11/07/16	Exceeding receiving water temperature
10/26/15	Coliform
10/09/15	Chlorine residual
08/11/14	Ammonia
07/31/14	Dichlorobromomethane
07/09/14	Dichlorobromomethane and TTHM
06/30/14	Dichlorobromomethane
06/12/14	Dichlorobromomethane
05/31/14	Dichlorobromomethane
05/05/14	Dichlorobromomethane

4. Impacts to Beneficial Uses

Discharges in excess of effluent limitations, SSOs, and overwhelming already saturated irrigation fields cause prohibited pollution by unreasonably affecting beneficial uses of neighboring waterways.

River Watch is understandably concerned as to the effects of both surface and underground exceedances of the Sewage System Permit limitations to beneficial uses applicable to Putah Creek, Alamo Creek, Ulatis Creek, and Gibson Canyon Creek, as well as the impacts of the City's SSOs in and around the diverse and sensitive ecosystem of the Facility and the locations where sewage spills from the City's collection system have occurred.

3. **The Person or Persons Responsible for the Alleged Violation**

The entity responsible for the alleged violations identified in this Notice is the City of Vacaville, as owner and operator of the Facility and its associated collection system, and as the owner and operator of the City's MS4.

4. The Location of the Alleged Violation

The location or locations of the various violations alleged in this Notice are identified in records created and/or maintained by or for the City which relate to its ownership and operation of the Facility and associated sewer collection system and the MS4 as described in this Notice.

5. Reasonable Range of Dates During Which the Alleged Activity Occurred

The range of dates covered by this Notice is April 22, 2014 through April 22, 2019. This Notice also includes all violations of the CWA by the City which may occur during and after this Notice period up to and including the time of trial.

6. The Full Name, Address, and Telephone Number of the Person Giving Notice

The entity giving notice is California River Watch, referred to throughout this Notice as “River Watch,” an Internal Revenue Code § 501(c)(3) non-profit, public benefit corporation duly organized under the laws of the State of California. Its headquarters and main office are located in Sebastopol. Its mailing address is 290 South Main Street, #817, Sebastopol, CA 95472. River Watch is dedicated to protecting, enhancing, and helping to restore surface waters and groundwaters of California including coastal waters, rivers, creeks, streams, wetlands, vernal pools, aquifers and associated environs, biota, flora and fauna, and educating the public concerning environmental issues associated with these environs.

River Watch may be contacted via email: US@ncriverwatch.org, or through its attorneys. River Watch has retained legal counsel with respect to the issues raised in this Notice. All communications should be directed to the undersigned.

RECOMMENDED REMEDIAL MEASURES

River Watch looks forward to meeting with City staff to tailor remedial measures to the specific operation of the Facility and associated sewage collection system and the MS4.

CONCLUSION

The violations set forth in this Notice affect the health and enjoyment of members of River Watch who reside and recreate in the affected community and may use the affected watershed for recreation, swimming, fishing, hiking, photography or nature walks. Their health, use and enjoyment of this natural resource is specifically impaired by the City’s alleged violations of the CWA as set forth in this Notice.

CWA §§ 505(a)(1) and 505(f) provide for citizen enforcement actions against any “person,” including a governmental instrumentality or agency, for violations of NPDES permit requirements and for un-permitted discharges of pollutants. 33 U.S.C. §§ 1365(a)(1) and (f), §1362(5). An action for injunctive relief under the CWA is authorized by 33 U.S.C. §1365(a). Violators of the Act are also subject to an assessment of civil penalties of up to \$54,833.00 per day/per violation pursuant to Sections 309(d) and 505 of the Act, 33 U.S.C. §§ 1319(d), 1365. *See also* 40 C.F.R. §§ 19.1-19.4. River Watch believes this Notice sufficiently states grounds for filing suit in federal court under the “citizen suit” provisions of CWA to obtain the relief provided for under the law.

The CWA specifically provides a 60-day “notice period” to promote resolution of disputes. River Watch encourages the City to contact counsel for River Watch within 20 days after receipt of this Notice to initiate a discussion regarding the allegations detailed in this Notice. In the absence of productive discussions to resolve this dispute, River Watch will have cause to file a citizen’s suit under CWA § 505(a) when the 60-day notice period ends.

Very truly yours,


Jack Silver

JS:lhbm

Service List

Andrew Wheeler, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N. W.
Washington, D.C. 20460

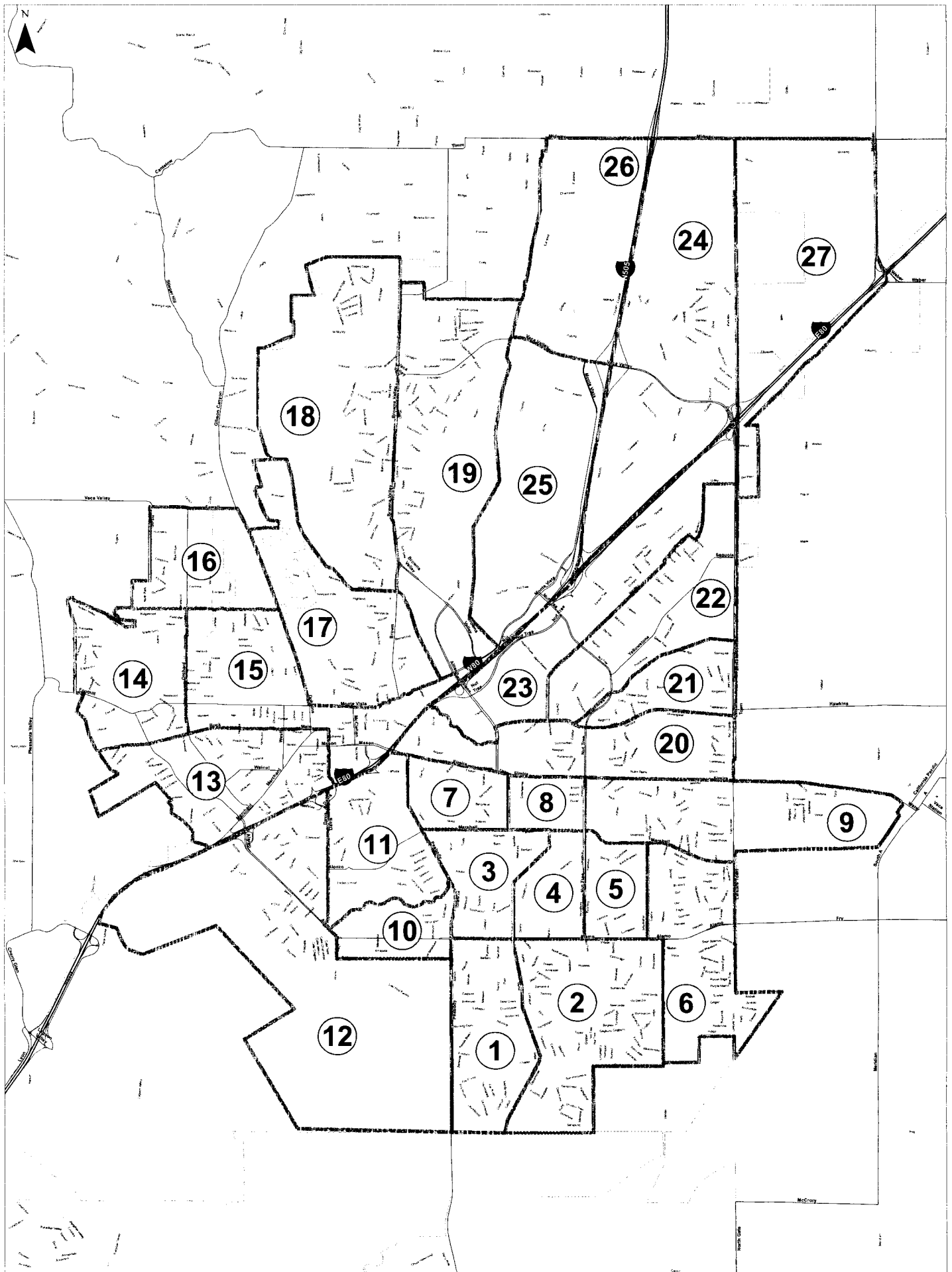
Michael Stoker, Regional Administrator
U.S. Environmental Protection Agency
Pacific Southwest, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Eileen Sobeck, Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812

Gregory J. Newmark, Esq.
MEYERS NAVE
707 Wilshire Blvd. 24th Floor
Los Angeles, CA 90017

Attachment 1

Water Quality Flushing Zones



Fire Hydrant Water Usage Summary 2018

Zone 1	Start 02/15/2018	End 02/20/2018							
	# Hydrants	Gallons Used							
6"	3	4800							
8"	149	473600							
12"	24	115200							
Totals	176	593600							
Zone 2	Start 2/20/2018	End 02/28/2018							
	# Hydrants	Gallons Used							
6"	14	22400							
8"	222	710400							
12"	26	124800							
Totals	262	857600							
Zone 3	Start 03/02/2018	End 03/05/2018							
	# Hydrants	Gallons Used							
6"	11	17600							
8"	50	160000							
10"	11	35200							
12"	9	124800							
Totals	81	337600							
Zone 4	Start 03/05/2018	End 03/ 06/ 2018							

	# Hydrants	Gallons Used						
6"	15	24000						
8"	45	144000						
12"	3	14400						
Totals	63	182400						
Zone 5	Start 03/06/2018	End 03/07/2018						
	# Hydrants	Gallons Used						
6"	7	11200						
8"	49	156800						
10"	6	19200						
12"	3	124800						
Totals	65	312000						
Zone 6	Start 03/06/2018	End 03/08/2018						
	# Hydrants	Gallons Used						
6"	1	1600						
8"	113	361600						
12"	6	28800						
18"	8	96000						
Totals	128	488000						
Zone 7	Start 03/12/2018	End 03/12/2018						
	# Hydrants	Gallons Used						
6"	21	33600						

8"	28	89600							
10"	4	12800							
12"	1	4800							
Totals	54	140800							
Zone 8	Start 03/12/2018	End 03/14/2018							
	# Hydrants	Gallons Used							
6"	7	11200							
8"	31	99200							
10"	3	9600							
12"	6	28800							
Totals	47	148800							
Zone 9	Start 03/14/2018	End 03/16/2018							
	# Hydrants	Gallons Used							
6"	5	8000							
8"	96	307200							
Totals	101	315200							
Zone 10	Start 03/16/2018	End 03/16/2018							
	# Hydrants	Gallons Used							
6"	6	9600							
8"	34	108800							
10"	2	6400							

12"	16	76800						
24"	1	Transmission line						
Totals	58	201600						
Zone 11	Start 03/19/2018	End 03/20/2018						
	# Hydrants	Gallons Used						
6"	5	8000						
8"	63	201600						
10"	3	32000						
12"	14	67200						
Totals	85	308800						
Zone 12a	Start 03/20/2018	End 03/27/2018						
	# Hydrants	Gallons Used						
4"	1	1000						
6"	10	10000						
8"	73	146000						
12"	37	185000						
14"	2	10000						
18"	4	44000						
24"	1	11000						
Totals	128	407000						
Zone 12b	Start 03/20/2018	End 03/27/2018						
	# Hydrants	Gallons Used						

[illegible]

Zone 15	Start 04/10/2018	End 04/11/2018						
	# Hydrants	Gallons Used						
4"	23	2300						
6"	16	16000						
8"	58	116000						
10"	3	9000						
12"	48	240000						
Totals	148	383300						
Zone 16	Start 04/12/2018	End 04/13/2018						
	# Hydrants	Gallons Used						
6"	27	27000						
8"	47	94000						
12"	15	75000						
Totals	89	196000						
Zone 17	Start 04/13/2018	End 04/17/2018						
	# Hydrants	Gallons Used						
6"	19	30400						
8"	64	204800						
10"	6	19200						
12"	16	76800						
Totals	105	331200						
Zone 18	Start 04/17/2018	End 04/23/2018						

	# Hydrants	Gallons Used							
6"	6	9600							
8"	109	348800							
12"	33	158400							
Totals	148	516800							
Zone 19a	Start 04/28/2018	End 04/30/2018							
	# Hydrants	Gallons Used							
6"	5	8000							
8"	147	470400							
12"	24	115200							
Totals	176	593600							
Zone 19b	Start 04/28/2018	End 04/30/2018							
	# Hydrants	Gallons Used							
6"	4	6400							
8"	46	147200							
10"	1	3200							
12"	27	129600							
Totals	78	286400							
Zone 20	Start 04/30/2018	End 05/04/2018							
	# Hydrants	Gallons Used							
8"	124	396800							

12"	30	144000						
Totals	154	540800						
Zone 21	Start 05/04/2018	End 05/04/2018						
	# Hydrants	Gallons Used						
8"	98	313600						
12"	3	14400						
Totals	101	328000						
Zone 22	Start 05/08/2018	End 05/10/2018						
	# Hydrants	Gallons Used						
6"	29	46400						
8"	82	262400						
12"	14	67200						
18"	8	89600						
Totals	133	465600						
Zone 23a	Start 05/10/2018	End 05/14/2018						
	# Hydrants	Gallons Used						
8"	30	96000						
12"	32	153600						
Totals	62	249600						
Zone 23b	Start 05/10/2018	End 05/14/2018						
	# Hydrants	Gallons Used						

8"	8	25600						
12"	76	364800						
Totals	84	390400						
Zone 24	Start 05/14/2018	End 05/16/2018						
	# Hydrants	Gallons Used						
12"	10	48000						
18"	17	190400						
Totals	27	238400						
Zone 25	Start 05/16/2018	End 05/16/2018						
	# Hydrants	Gallons Used						
12"	63	302400						
Totals	63	302400						
Zone 26	Start 05/17/2018	End 05/17/2018						
	# Hydrants	Gallons Used						
12"	33	158400						
18"	8	89600						
Totals	8	89600						
Total	2933	9927500						

Attachment 2

**PROXIMITY OF HUMAN SENSITIVE RECEPTORS TO VACAVILLE WELLS WITH
LEVELS OF HEXAVALENT CHROMIUM ABOVE 10 MICROGRAMS PER LITER**

Address in Vacaville	Cr(VI) Conc.	Distance to Closest Well	Closest Well Recent Cr(VI) Conc.
126 Eldorado Way	7 to 21 µg/l	784 feet to Well 14	22 µg/l
1000 New Horizons Way	13 to 15 µg/l	1,265 feet from Well 16	24 µg/l
811 Eubanks Drive	12 to 15 µg/l	5,977 feet from Well 16	24 µg/l
1000 Hickcock Drive	16 µg/l	6,046 feet from Well 14	22 µg/l
5271 Winding Way	11 to 16 µg/l	11,010 feet from Well 15	11 µg/l